

What is claimed is:

1. A method for automatically testing in parallel multiple variable air volume (VAV) boxes coupled to the same floor level network comprising:  
communicating with a floor level network from a building level network; and  
sending at least one test parameter to a plurality of variable air volume (VAV) boxes coupled to the floor level network so that at least two VAV boxes are responding to the one test parameter at approximately the same time.
2. The method of claim 1 further comprising:  
sending at least one test parameter associated with a first test procedure to a first VAV box coupled to the floor level network; and  
sending at least one test parameter associated with a second test procedure to a second VAV box coupled to the floor level network so that the first and second VAV boxes are responding to a test parameter associated with different test procedures at approximately the same time.
3. The method of claim 1 further comprising:  
sending a calibration procedure parameter to a first VAV box coupled to the floor level network; and  
delaying before sending the calibration procedure parameter to a second VAV box coupled to the floor level network so that the first and second VAV boxes are not responding to the calibration procedure parameter at approximately the same time.

4. The method of claim 1 further comprising:

receiving test messages from the VAV boxes coupled to the floor level network in response to the at least one test parameter sent to the VAV boxes; and  
analyzing the test messages received from the VAV boxes to determine whether a VAV box passed a test.

5. The method of claim 4, further comprising:

determining a cause for a test failure from at least one test message received from at least one VAV box.

6. The method of claim 4, further comprising:

generating a warning in response to a VAV box passing a test, the warning indicating a marginal condition in the VAV box.

7. The method of claim 1 further comprising:

polling a plurality of devices coupled to the floor level network;  
determining from an identifier in a response to the polling whether a device is a VAV box; and  
storing the identifier in a VAV procedure list in response to a determination that the device is a VAV box.

8. The method of claim 1 further comprising:

sending at least one test parameter from a calibration procedure, an auto zero module procedure, a damper operation and airflow procedure, a heating function procedure, and a control function procedure to at least one of the VAV boxes coupled to the floor level network.

9. The method of claim 8 further comprising:

terminating testing of a VAV box coupled to the floor network in response to the VAV box failing to calibrate.

10. The method of claim 8 further comprising:

determining whether a temperature message received from a VAV box in response to a test parameter for the heating function procedure contains a room temperature or a discharge temperature.

11. A system for automatically testing in parallel multiple variable air volume (VAV) boxes coupled to the same floor level network comprising:  
a building level network interface for communicating with a floor level network from a building level network; and  
a test manager for sending at least one test parameter to a plurality of variable air volume (VAV) boxes coupled to the floor level network so that at least two VAV boxes are responding to the one test parameter at approximately the same time.
12. The system of claim 11 wherein the test manager sends through the building level network interface at least one test parameter associated with a first test procedure to a first VAV box coupled to the floor level network; and also sends through the building level network interface at least one test parameter associated with a second test procedure to a second VAV box coupled to the floor level network so that the first and second VAV boxes are responding to a test parameter associated with different test procedures at approximately the same time.
13. The system of claim 11, wherein the test manager sends a calibration procedure parameter to a first VAV box coupled to the floor level network; and the test manager delays before sending the calibration procedure parameter to a second VAV box coupled to the floor level network so that the

first and second VAV boxes are not responding to the calibration procedure parameter at approximately the same time.

14. The system of claim 11, the test manager further comprising:

a receiver for receiving test messages from the VAV boxes coupled to the floor level network in response to the at least one test parameter sent to the VAV boxes; and  
an analyzer for analyzing the test messages received from the VAV boxes to determine whether a VAV box passed a test.

15. The system of claim 14, wherein the analyzer determines a cause for a test failure from at least one test message received from at least one VAV box.

16. The analyzer of claim 14, further comprising:

a warning generator for generating a warning in response to a VAV box passing a test, the warning indicating a marginal condition in the VAV box.

17. The system of claim 11, wherein the test manager polls through the building level network interface a plurality of devices coupled to the floor level network and stores identifiers in a VAV procedure list that correspond to VAV boxes coupled to the floor level network.

18. The system of claim 11 further comprising:

a data repository for storing at least one test parameter for a calibration procedure, an auto zero module procedure, a damper operation and airflow procedure, a heating function procedure, and a control function procedure; and

the test manager sends at least one test parameter from each procedure stored in the data repository to at least one of the VAV boxes coupled to the floor level network.

19. The system of claim 18, wherein the test manager terminates testing of a VAV box coupled to the floor network in response to the VAV box failing to calibrate.

20. The system of claim 18, wherein the test manager determines whether a temperature message received from a VAV box in response to a test parameter for the heating function procedure contains a room temperature or a discharge temperature.